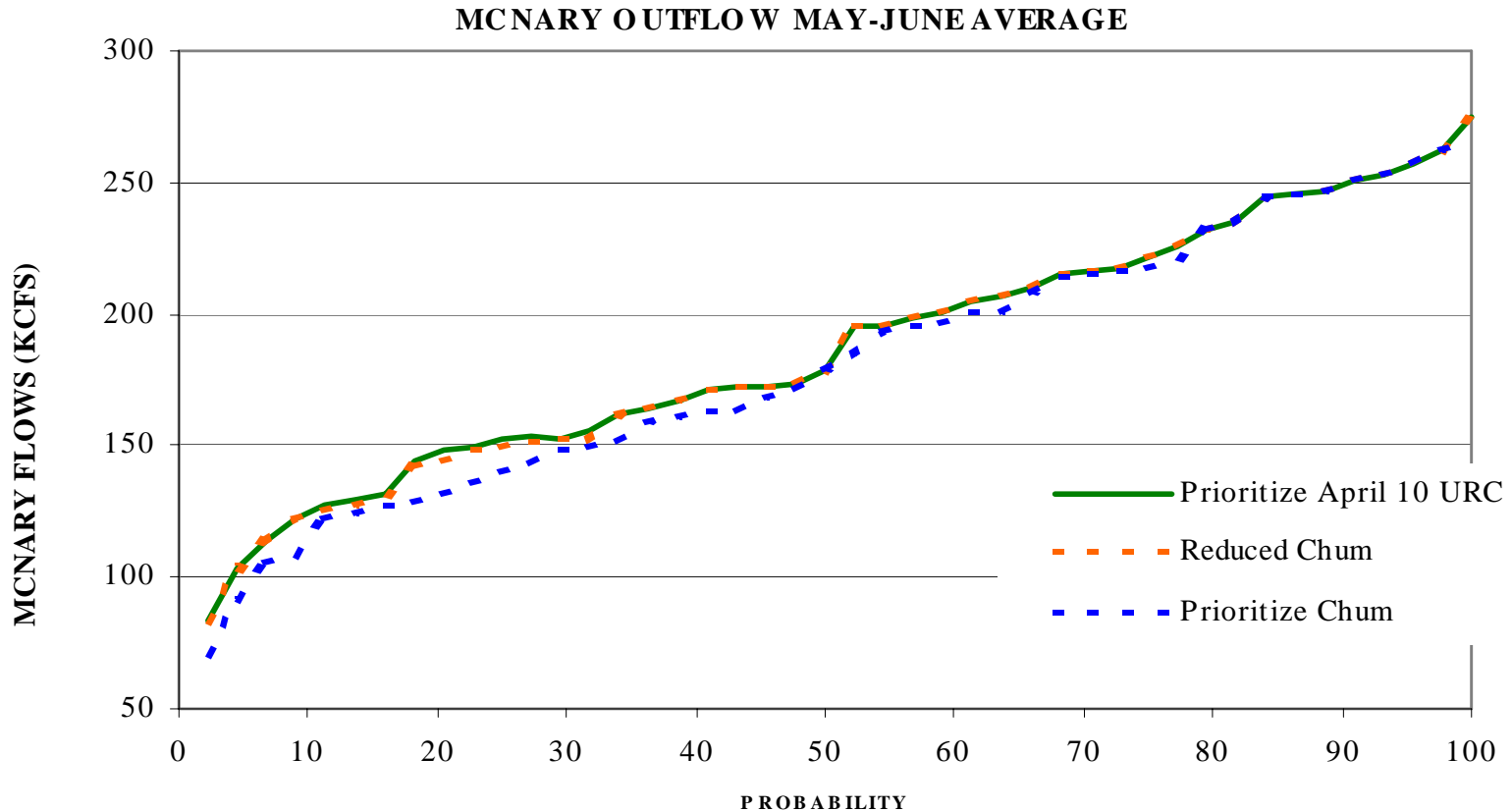


# Assumptions (BPA 1/22/03)

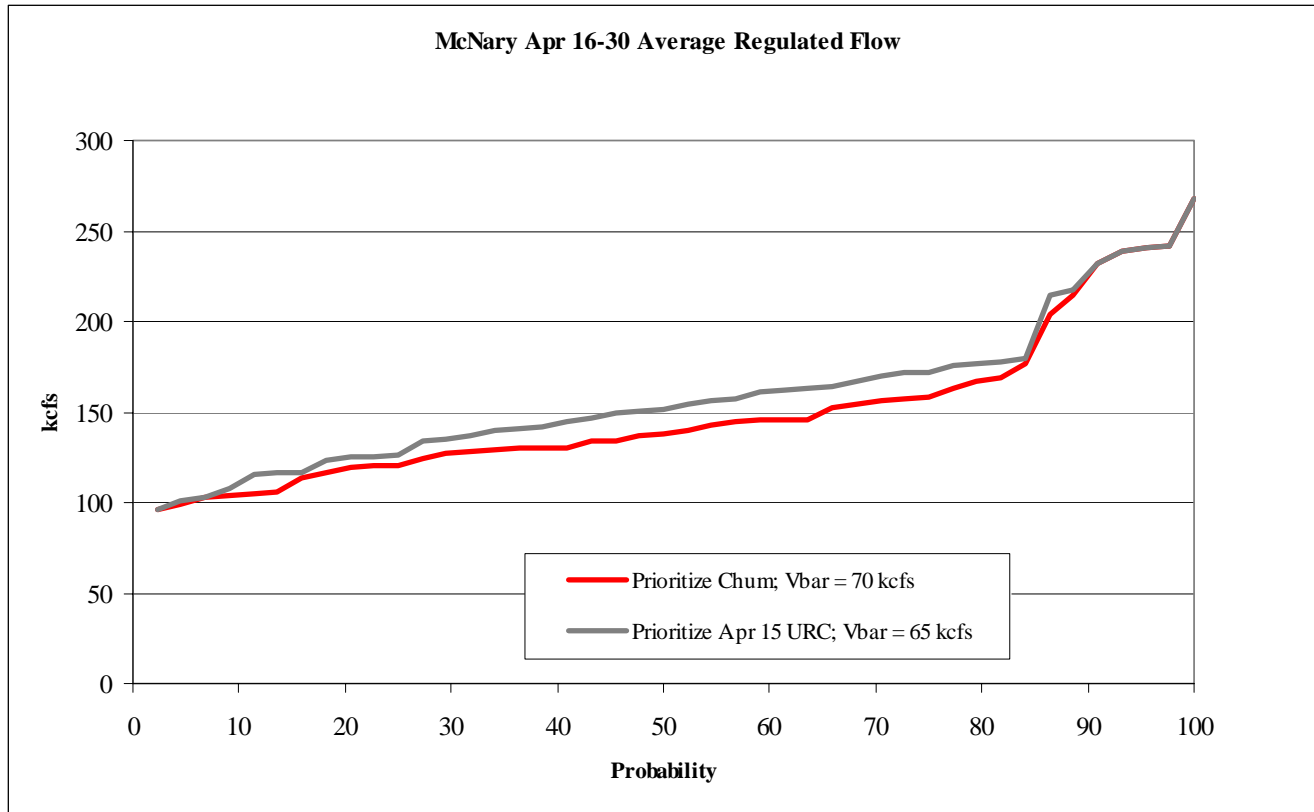
- 44 ESP streamflows with a mean of 79 Maf and a 95% confidence range of 60-101 Maf
- GCL refill on June 30 takes precedence over May-June flow target at McNary
- GCL initialized to 1283' on February 1
- 90% probability of GCL April 15 FCE = 1283.3'

# Spring Flow Implications



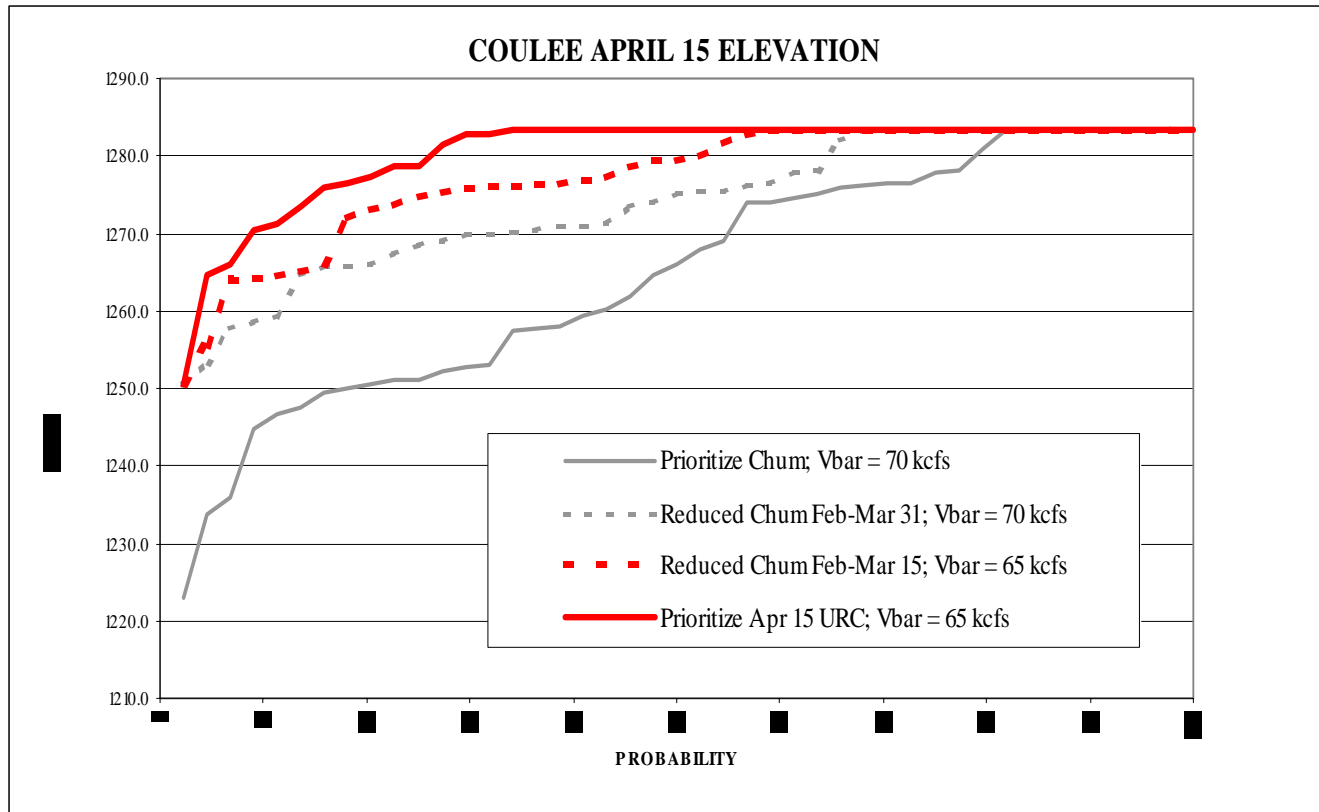
- Prioritize April 15: Abandon chum flows Feb 1, Vernita Bar = 65 kcfs
- Reduced Chum (3/15): Chum = 115 kcfs February – March 15, Vernita Bar = 65 kcfs
- Prioritize Chum: Chum = 125 kcfs February and March, Vernita Bar = 70 kcfs

# Spring Flow Implications



- Prioritize April 15: Abandon chum flows Feb 1, Vernita Bar = 65 kcfs
- Prioritize Chum: Chum = 125 kcfs February and March, Vernita Bar = 70 kcfs

# April 15 Refill Implications



- Prioritize April 15: Abandon chum flows Feb 1, Vernita Bar = 65 kcfs
- Reduced Chum (3/15): Chum = 115 kcfs February – March 15, Vernita Bar = 65 kcfs
- Reduced Chum (3/31): Chum = 115 kcfs February – March 31, Vernita Bar = 70 kcfs
- Prioritize Chum: Chum = 125 kcfs February and March, Vernita Bar = 70 kcfs

# April 15 Refill Implications

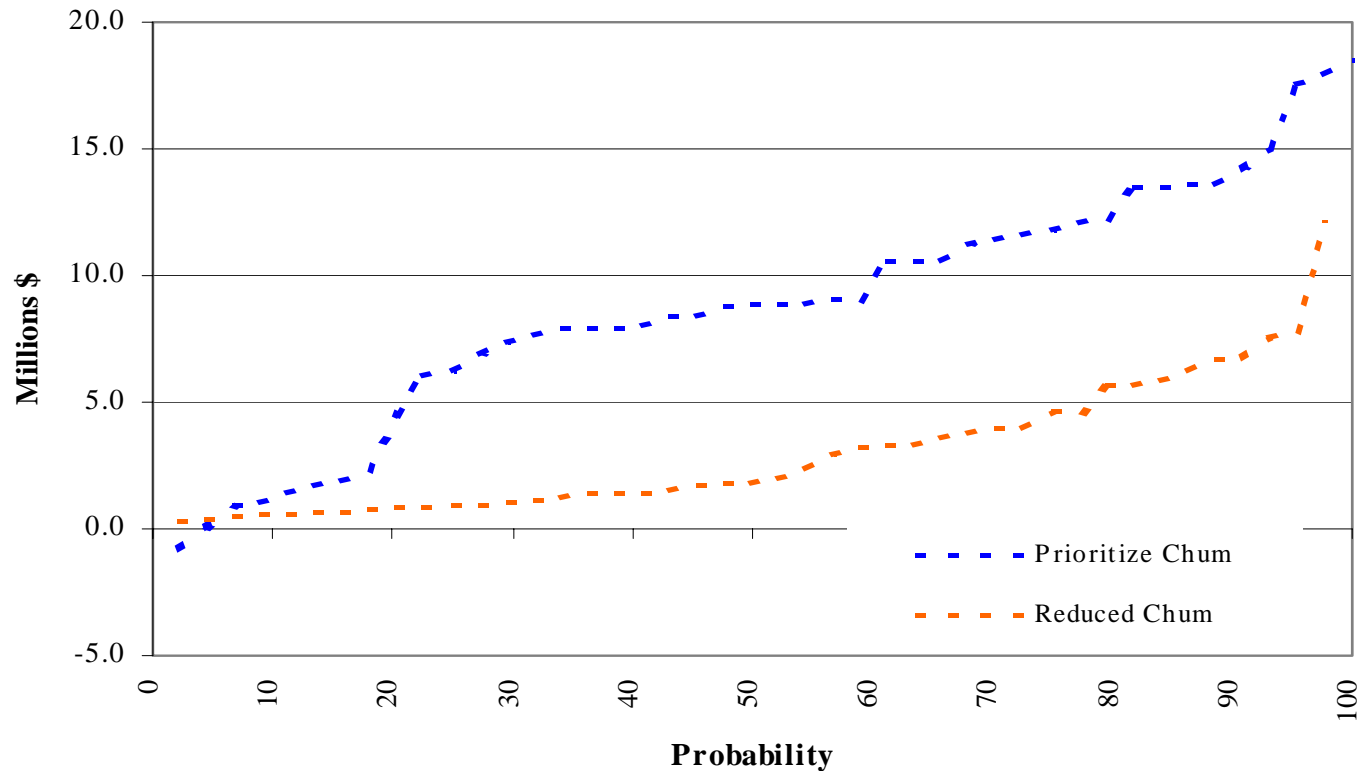
## Probability of Achieving April 15 Upper Rule Curve

	Reduced Chum (3/15)		Reduced Chum (3/31)		Prioritize Apr 15	Prioritize Chum
	Vbar = 65	Vbar = 70	Vbar = 65	Vbar = 70	Vbar = 65	Vbar = 70
<b>Probability</b>	52.3%	43.2%	52.3%	43.2%	77.3%	29.5%
<b>Average Miss</b>	9.2 ft	13.6 ft	13.9 ft	15.9 ft	6.4 ft	23.9 ft
	675 kaf	996.5 kaf	1009 kaf	1158 kaf	459 kaf	1683 kaf

- **Prioritize April 15:** Abandon chum flows Feb 1, Vernita Bar = 65 kcfs (note that dewatered chum in February may be rewatered in March in some conditions)
- **Reduced Chum (3/15):** Chum = 115 kcfs February – March 15, Vernita Bar = 65/70 kcfs
- **Reduced Chum (3/31):** Chum = 115 kcfs February – March 31, Vernita Bar = 65/70 kcfs
- **Prioritize Chum:** Chum = 125 kcfs February and March, Vernita Bar = 70 kcfs

# BPA Financial Implications

## Incremental Secondary Revenues for Alternative VB/Chum Flows (Relative to Prioritizing April 10 URC)



- Prioritize April 15: Abandon chum flows Feb 1, Vernita Bar = 65 kcfs
- Reduced Chum (3/15): Chum = 115 kcfs February – March 15, Vernita Bar = 65 kcfs
- Prioritize Chum: Chum = 125 kcfs February and March, Vernita Bar = 70 kcfs

# Next Steps

- Test Thursday, January 16, to evaluate number of redds effected if Bonneville tailwater reduced to 11.0 ft.
- TMT meeting January 22 to review hydro analyses which look at impacts to April 10 refill and spring flows under various flow scenarios.